

# Lugols iodine

# **GCC Diagnostics**

Ready prepared, prefiltered reagent for general purpose staining reagent use in microbiology and as the intermediate reagent in the GRAM stain technique between the Primary and Counterstains.

This reagent has been prefiltered before packaging to eliminate the possibility of dye particles on the slide being mistaken for microbial organismns.

# Specification:

Available in 250ml, 500ml & 11tr pack sizes.

Shelf life is 3 years.

# Method: (For Gram Staining)

- 1 Prepare heat fixed smear by passing the slide, smear side up, 5-6 times through a Bunsen flame.
- 2 Flood the slide with crystal violet oxalate solution for 1 minute.
- 3 Wash off excess dye by swirling in a beaker of tapwater for 4-5 seconds.
- 4 Flood slide with iodine solution, drain off the excess, again flood the slide with Lugols Iodine solution for 1 minute.
- 5 Wash the slide in a beaker of tapwater, overwashing is difficult at this stage.
- 6 Decolourise by running the differentiator solution over the surface of the slide for 5-20 seconds for thin smears and 20-60 seconds for thick smears, until crystal violet no longer bleeds from the smear.
- 7 Wash in tap water to stop the action of the differentiator.
- 8 Flood slide with Neutral red counterstain for 1 minute.
- 9 Wash very lightly in a beaker of water to remove excess sounterstain. Excessive washing at this stage will remove the counterstain from Gram negative organisms.
- 10 Blot dry and examine.

The method given in this leaflet is designed as a general guide only.

Results:	Gram positive organisms	- Purple/Black
	Gram negative organisms	- Shades of red

Storage: Reagent is stable at cool room temperature in darkened cupboard for the shelf life.

### Health & Safety:

Reagent will stain the skin and eyes and other tissue. In normal usage there is no real risk to physical Health & Safety. If in contact with eyes rinse with eye batch for 5 minutes. If soreness persists seek medical attantion. In case of contact with skin wash with soap and water. If ingested, wash out mouth with water, do not swallow rinse water, seek medical attention on what treatment to administer. R: 36 S: 24-25-36

### Waste disposal :

In the volumes involved in this procedure, the product can be disposed of to the public sewer system diluting it with water during disposal. However, local regulations may change and the user should follow local regulatory requirements. The bottle is polyethylene and should be re-cycled.

### Unsatisfactory performance

As part of our duty to monitor product performance and our policy of continual improvement. Please report to us any unsatisfactory performance you may experience with this product. If any reagent degrades before expiry of shelf life we will replace that reagent free of charge. GCC Diagnostics guarantees the quality of this product, the user should however determine the suitability of this product for their intended use.

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